



American National Standards Committee C63[®]

Electromagnetic Compatibility

Subcommittee 7: Spectrum Etiquette

Chair: Jason Coder

Vice Chair: Stephen Berger

Secretary: (Vacant)

Rohde & Schwarz USA, Coppel, TX

October 2nd, 2024; 3:30 PM – 5:00 PM EDT

Approved Minutes

1. **Call to Order (Chair)** - The Chair called the meeting to order at 3:38PM-EDT
 - 1.1 **Announcements, Chair** - Jerry Ramie will be taking the minutes today.
 - 1.2 **Meeting logistics announcements (Chair):** N/A
 - 1.3 **Introductions (Secretary):** roll call (note attendees, absences, **excused absences** & **errors**) Report any roster errors to the ANSC-C63[®] Secretary

Subcommittee 7 Membership Roster (roster was corrected 10/10/2024)

Name	Role within SC 7	Affiliation
Al-Kalaa, Omar	Member	FDA (Expert)
Berger, Stephen	Vice Chair	TEM Consulting
Case, Dave	Member	Consultant
Coder, Jason	Chair	NIST (Primary Rep)
Crumm, Allen (non-voting)	Secretary	SSC Labs
DeLisi, Bob	Member	UL LLC (Primary Rep)
Hoolihan, Dan	Member	Hoolihan EMC Consulting (Individual)
Jones, Steve	Member	Member Emeritus
Rajamani, Vignesh	Member	Rohde & Schwarz USA
Refai, Hazem	Observer	University of Oklahoma
Rison, Justin	Member	FCC Lab (FCC Alternate Rep)
Salem, Pelin	Member	Cisco Systems, Inc.
Schaefer, Dave	Member	Element Materials Technology (Primary Rep)
Silberberg, Jeffrey L.	Member	FDA-CDRH (FDA Primary Rep)

Guests and Observers: (non-voting): Jerry Ramie, Yongkang Liu, Chad Beattie, Steve Koster, Bill Graff, Tom Braxton, Richard Jankovics, Henry Benitez, Steve Anderson, David Chamberlain, Ken Gjerde, Nick Abbondante, Hans-Peter Bower

- 1.4 **Quorum: (50% of roster) constitutes a quorum.** (rounding up) (13 roster members / 2 = 6.5 >> 7 (therefore 7 people are required for a quorum). **Was quorum achieved? (Yes)** If not, any actions taken are subject to confirmation by electronic ballot or at a future meeting. **2 present**, so **quorum was achieved**.
2. **Approval of the Consent Agenda (includes Agenda and previous minutes) - Secretary** - The Agenda was approved by acclamation.

NOTE: Two sets of minutes were found after the meeting ended: ([20231004_SC7_Minutes](#)) ([20240516_SC7_Minutes](#)) These were circulated to SC7 from Oct. 12 through Oct. 19 and no objections to their approval were noted. ([20231004_SC7_Approved_Mins](#)) ([20240516_SC7_Approved_Mins](#)) They were sent to Shannon for posting on 10/19/2024

2.1 Review of the [patent slides](#) (Secretary) - The patent slides were shown and all agreed to the policies.

3. Review of [Subcommittee Membership](#): Chair - Report any errors to the ANSC-C63[®] Secretary

3.1 Review of Membership Guidelines – members at risk?

Subcommittees:

For an individual to remain a voting member of a Subcommittee, active participation in Subcommittee meetings and regular responses to Subcommittee email votes is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or remotely via web conference (when used)) or respond to at least one of every two consecutive Subcommittee email votes, their membership in that Subcommittee may be at risk.

Note: Abstentions shall be treated the same as a “yes” or “no” vote regarding the requirement to respond to email votes.

Working Groups:

For an individual to remain a member of a Working Group, active participation is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or via web conference (when used)) their membership in that Working Group may be at risk. Individual Working Groups may establish additional participation criteria and/or modify this requirement.

Member Attendance Log: (insert member attendance log as shown) **Any errors in the log?**

Name	5/18/21	9/21/21	2/14/22	5/18/22	11/9/22	5/11/23	10/4/23	5/16/24	10/02/24
Al-Kalaa, Mohamad	X	X	X	X	X	X	X	A	
Berger, Stephen	X	X	X	X	A	X		X	
Case, Dave	X	X	X	X	X			A	
Coder, Jason	X	X	X	X	X	X	X	X	
Crumm, Allen	X	X	X	X	X	X	X	X	
DeLisi, Bob		X	X	X	X	X	X	X	
Hoolihan, Dan		X	X	X	X	X		X	
Jones, Steve	X			X	X	X		X	
Rajamani, Vignesh								X	
Refai, Hazem		X	X	X	X	X			
Rison, Justin								X	
Salem, Pelin				X	X			A	
Schaefer,								X	

Dave Silberberg, Jeff									
	X	X	X	X	X	X	X	X	

Any members at risk? None are at risk.

3.2 Consideration of new members? [Application for C63® Subcommittee Membership](#)

Richard Jankovics (UL Solutions - Expert) [Application Resume](#) - The application was approved. **AI-26:** Jerry to add Mr. Jankovics and other corrections to the SC7 roster (Jerry replaces Allen)

4. ~~Approval of [Scope: Chair](#) – (Spring Meeting Only) (Report approval or any changes to the Main Committee)~~

~~**Scope:** Subcommittee 7 develops standards addressing spectrum etiquettes, wireless-coexistence, and related technical fields to provide new or amended measurement techniques to support efficient spectrum utilization. This scope includes areas related to coordinated or uncoordinated spectrum sharing schemes and dynamic spectrum access.~~

~~4.1 Election of Officers (as required)~~

~~Chair's second term expires end of 2025.~~

5. Working Group reports More information about each standard is available on the Standards Status Matrix page of the [C63® web site](#). This information will be reviewed for accuracy at each Subcommittee meeting.

5.1 C63.17 - Unlicensed Personal Communications Service (PCS) Devices - Berger (insert link to WG report) Verify accuracy of document status matrix content and report any errors to the ASC-C63® Secretary. **Text is current**

C63.17-2020 Learn more	Unlicensed Personal Communications Service (PCS) Devices	SC 7	Berger, Stephen	C63.17 PINS	Reaffirmed 2020.
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C63.17: C63.17-2013 Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices

Contact: [Berger, Stephen](#) (Former Working Group Chair)

Scope: Revision of IEEE Std C63.17-1998. Specific test procedures are established for verifying the compliance of unlicensed personal communications services (UPCS) devices with applicable regulatory requirements regarding radio-frequency (RF) emission levels and spectrum access procedures.

Status: Current. No plans for further maintenance at this time.

Purchase: [IEEE Store](#). To purchase individual standards, go to the IEEE store and search on the standard number.

Is this information correct? (Yes)

5.2 C63.27 – Evaluation of Wireless Coexistence - Coder (insert link to WG report) Verify accuracy of document status matrix content and report any errors to the ASC-C63® Secretary. **Content is current.**

C63.27-2021 Learn more	Evaluation of Wireless Coexistence	SC 7	Coder, Jason	C63.27 PINS	Published 5/17/22.
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C63.27-2021: American National Standard for Evaluation of Wireless Coexistence

Contact: [Coder, Jason](#) (Former Working Group Chair)

Scope: This revision of the C63.27 standard provides improvements to the evaluation procedure and supporting test methods for wireless coexistence and evaluation of key performance indicators (KPI). The revised standard will provide evaluation procedures, test methods and other guidance necessary for performing the evaluation.

Status: Current.

Purchase: Current version available for sale.

5.3 C63.27-202X (Corr1) – Evaluation of Wireless Coexistence Corrigendum 1 (no WG report) Verify accuracy of document status matrix content and report any errors to the ANSC-C63® Secretary.

C63.27-202X-Corr1 Learn more	Evaluation of Wireless Coexistence – Corrigendum 1	SC 7	Liu, Yongkang	C63.27-202x Corr1 PINS	Under development
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Is this information correct? (No; incomplete)

Need to update status matrix on web site. **AI-27:** Jason Coder to supply additional text and the [PINS for C63.27-202x \(Corr1\)](#) for Jerry to post on the Status of Standards matrix. (copy PINS to Jennifer) **AI-28:** Jerry to add a new C63.27 Corrigendum roster to bottom of the SC7 page and populate it with persons shown in [SC7 Fall report](#) (email addresses coming from Jason)

6. Other Old Business: Chair

6.1 Written reports - Written reports of the Subcommittee meeting shall be presented by the Subcommittee Chair at the Main Committee meeting. These reports shall be made using the [C63 PowerPoint template wide](#). Prior to the Main Committee meeting, the reports and [approved previous meeting minutes](#) shall be provided to the projectionist for showing on the projector screen at the meeting. The Presentation and any written report shall also be sent by the Subcommittee Chair to the ASC-C63® [Newsletter editor](#).

- [SC7 Fall report](#) to steering committee and main committee is available online. **AI-29:** Jason to develop a PINS to address TPC test methods

6.2 Coordination with SC2 for definitions - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC2 Chair for evaluation and coordination of the definitions used.

- No new contact to report.

- 6.3 Coordination with SC3 for harmonization** - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC3 Chair for evaluation and coordination of any harmonization effort.

- No new contact to report.

6.4 Updates on Action Items

- a. UL Interpretation request posted.
- b. Discussion on development of AFC testing scheme (referral from C63.10 WG)

7. New Business (Chair):

- a. Discussion of next revision of C63.27 is in the [SC7 Fall report](#). (shown below)

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**American National Standards
Committee C63 - EMC**

7. New Business

- Next revision of C63.27
 - Possible content:
 - Adjustments to Annex A to account for current generation of Wi-Fi and cellular technology (requested from FDA)
 - Addition to Annex A to include an example for FHSS and DSSS systems (requested by NIOSH – mining industry)
 - Change conducted test setup to more closely reflect radiated setup, account for two-way coexistence testing (requested by NIST)
 - Further clarifications on the applicability of the standard: not just medical, not just technologies specified in Annex A
 - FDA, NIST are willing to participate and make contributions
 - Discussion on timeline.
 - Spring 2024 meeting – Draft PINS once Corrigendum leaves the Subcommittee.

Omar Al-Kalaa discussed updating the C63.27 Standard by augmenting Annex A. IEC 60601-1-2 to integrate wireless coexistence testing into 60601-1. Hans-Peter Bower (R&S Dallas) discussed the power requirement up to 300W in C63.27. Who can afford pre-compliance testing? Nick A. noted that radiated immunity or antenna conducted immunity is allowed, even though these are very different coupling mechanisms in the real world. **AI-30:** Jason to present draft PINS for revision of C63.27 to SC7 at the Spring 2025 meeting.

8. [C63.org](#) website use and updates: Secretary - We normally post documents to the [SC7 protected area](#). If any SC or WG needs help with this posting, a Technical Secretary is available to assist.

9. Review of the Action Items: Secretary -

9.1 Review of Action Items from this meeting: (read Action Items to Members, who must agree that they understand their meaning)

9.2 Review of Action Items from previous meeting: (insert consolidated Action Item table from the previous meeting Minutes as shown below)

Consolidated Action Items from 20240516 Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
AI-25:	Jason to continue monitoring the situation, and provide options for SC 7 involvement.	Jason Coder	Closed		
AI-26:	Allen to amend roster	Allen Crumm	Closed	Next meeting	Roster modified by Jerry 10/10/2024
AI-27:	Jason to create a PINS for a C63.27 corrigendum	Jason Coder	Open		
AI-28:	Jason scope what an AFC testing standard would look like and report back by next meeting.	Jason Coder	Open	40	
AI-29:	Jason to write a call for participation for a C63.27 corrigendum participation.	Jason Coder	Open	May 31st	

Next meeting date/location: Week of May 5, 2024 @ TUV in Boxborough, MA

10. Closing remarks and Adjournment: The Chair thanked the group for their contributions and adjourned the meeting at 4:58PM-EDT.

***** End of Meeting *****

Consolidated Action Items from 20241002 Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
A/I 26	Jerry to add Mr. Jankovics and other corrections to the SC7 roster (Jerry replaces Allen)	Jerry Ramie	Closed	Next Meeting	Added 10/10/24
AI-27:	Jason Coder to supply additional text and the PINS for C63.27-202x (Corr1) for Jerry to post on the Status of Standards matrix. (copy PINS to Jennifer)	Jerry Ramie Jason Coder	Closed	Next Meeting	Need "Learn more" text PINS sent by Bob to Jennifer
AI-28:	Jerry to add a new C63.27 Corrigendum roster to bottom of the SC7 page and populate it with persons shown in SC7 Fall report (email addresses coming from Jason)	Jerry Ramie	Closed	Next Meeting	Added 10/10/24
AI-29:	Jason to develop a PINS to address TPC test methods	Jason Coder	Open	Next Meeting	
AI-30:	Jason to present draft PINS for revision of C63.27 to SC7 at the Spring 2025 meeting	Jason Coder	Open	Next Meeting	